



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,691	01/30/2004	Eric Justin Gould Bear	MSFT-3471/304033.02	8609
41505	7590	11/12/2008	EXAMINER	
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			MCDOWELL, JR, MAURICE L	
			ART UNIT	PAPER NUMBER
			2628	
			MAIL DATE	DELIVERY MODE
			11/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/769,691	Applicant(s) BEAR ET AL.	
	Examiner MAURICE MCDOWELL, JR	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 30 January 2004.
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-45 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-45 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/20/2008; 1/28/2008; 3/14/2005.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

1 DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claim 45 is rejected under 35 U.S.C. 102(a) as being anticipated by Tenhunen et al. Pub. No.: US 2002/0198029 A1.

3. Regarding claim 45, Tenhunen teaches: A hardware control device comprising means for logically remapping the commands to logical buttons for a navigational device coupled to a physically rotate-able display device having a display (figs. 1a-1c).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 4-9, 12-13, 15-20, 23-24, 26-31, 34-35, 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tenhunen et al. Pub. No.: US 2002/0198029 A1 in view of Zatloukal et al. Pub. No.: US 2003/0073462 A1.

Art Unit: 2628

6. Regarding claim 1, Tenhunen teaches: A method for logically remapping the commands to logical buttons for a navigational device coupled to a physically rotate-able display device having a display, said navigational device having logical buttons and associated commands for such logical buttons, said method comprising; logically remapping the commands to the logical buttons based on the orientation of the display device (figs. 1a-1c).

7. Tenhunen doesn't teach: determining an orientation for the display device.

8. The analogous prior art Zatloukal teaches: determining an orientation for the display device (fig. 3, 310) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine determining an orientation for the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

10. Regarding claim 2, Tenhunen teaches: The method wherein the display device is a visual display device (figs. 1a-1c).

11. Regarding claim 4, Tenhunen teaches: The method wherein the display device is one from the group comprising: visual display device, audio display device, and tactile display device (figs. 1a-1c).

12. Regarding claim 5, Tenhunen teaches: The method wherein, then the logical mapping of the commands to the logical buttons occurs automatically (figs. 1a-1c).

13. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

Art Unit: 2628

14. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

15. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

16. Regarding claim 6, Tenhunen teaches: The method wherein, then the logical mapping of the commands to the logical buttons occurs in response to user input [0026] (The key pad can be reprogrammed to operate in different ways depending on position of mobile station) (If the position of the mobile station changes then so does the position of the display device).

17. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

18. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in

Art Unit: 2628

Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

20. Regarding claim 7, Tenhunen doesn't teach: The method wherein, regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device.

21. The analogous prior art Zatloukal teaches: The method wherein, regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

23. Regarding claim 8, Tenhunen teaches: The method wherein, then the logical mapping of the commands to the logical buttons occurs automatically (figs. 1a-1c).

24. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

25. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display

Art Unit: 2628

device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

26. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

27. Regarding claim 9, Tenhunen teaches: The method wherein, if the navigational control device is symmetrical both vertically and horizontally, the logical remapping rotates the commands to the logical buttons (figs. 1a-1c).

28. Regarding claim 12, Tenhunen teaches: A user interface system attached to a display device, said system implementing the method of claim 1 for logically remapping the commands to logical buttons for a navigational device coupled to a physically rotate-able display device having a display, said navigational device having logical buttons and associated commands for such logical buttons, said system comprising; and a subsystem for logically remapping the commands to the logical buttons based on the orientation of the display device (figs. 1a-1c).

29. Tenhunen doesn't teach: a subsystem for determining an orientation for the display device.

30. The analogous prior art Zatloukal teaches: a subsystem for determining an orientation for the display device (fig. 3, 310) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

Art Unit: 2628

31. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine a subsystem for determining an orientation for the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

32. Regarding claim 13, Tenhunen teaches: The system wherein the display device is a visual display device (figs. 1a-1c).

33. Regarding claim 15, Tenhunen teaches: The system wherein the display device is one from the group comprising: visual display device, audio display device, and tactile display device (figs. 1a-1c).

34. Regarding claim 16, Tenhunen teaches: The system wherein, then the logical mapping of the commands to the logical buttons occurs automatically (figs. 1a-1c).

35. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

36. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

37. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

Art Unit: 2628

38. Regarding claim 17, Tenhunen teaches: The system wherein, then the logical mapping of the commands to the logical buttons occurs in response to user input [0026].

39. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

40. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

41. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

42. Regarding claim 18, Tenhunen doesn't teach: The system wherein, regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device.

43. The analogous prior art Zatloukal teaches: The system wherein, regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

Art Unit: 2628

44. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

45. Regarding claim 19, Tenhunen teaches: The system wherein then the logical mapping of the commands to the logical buttons occurs automatically (figs. 1a and 1c).

46. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

47. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

48. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

49. Regarding claim 20, Tenhunen teaches: The system wherein, if the navigational control device is symmetrical both vertically and horizontally, the logical remapping rotates the commands to the logical buttons (figs. 1a-1c).

Art Unit: 2628

50. Regarding claim 23, Tenhunen teaches: A computer-readable medium having computer-readable instructions for a method of logically remapping the commands to logical buttons for a navigational device coupled to a physically rotate-able display device having a display, said navigational device having logical buttons and associated commands for such logical buttons, said method comprising; logically remapping the commands to the logical buttons based on the orientation of the display device (figs. 1a-1c).

51. Tenhunen doesn't teach: determining an orientation for the display device.

52. The analogous prior art Zatloukal teaches: determining an orientation for the display device (fig. 3, 310) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

53. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine determining an orientation for the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

54. Regarding claim 24, Tenhunen teaches: The computer-readable instructions wherein the display device is a visual display device (figs. 1a-1c).

55. Regarding claim 26, Tenhunen teaches: The computer-readable instructions wherein the display device is one from the group comprising: visual display device, audio display device, and tactile display device (figs. 1a-1c).

56. Regarding claim 27, Tenhunen teaches: The computer-readable instructions wherein, then the logical mapping of the commands to the logical buttons occurs automatically (figs. 1a-1c).

Art Unit: 2628

57. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

58. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

59. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

60. Regarding claim 28, Tenhunen teaches: The computer-readable instructions wherein, then the logical mapping of the commands to the logical buttons occurs in response to user input [0026].

61. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

62. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

63. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation,

Art Unit: 2628

presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

64. Regarding claim 29, Tenhunen doesn't teach: The computer-readable instructions wherein, regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device.

65. The analogous prior art Zatloukal teaches: The computer-readable instructions wherein, regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

66. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the orientation is determined based on the orientation of a display on a display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

67. Regarding claim 30, Tenhunen teaches: The computer-readable instructions wherein, then the logical mapping of the commands to the logical buttons occurs automatically (figs. 1a-1c).

68. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

Art Unit: 2628

69. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

70. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

71. Regarding claim 31, Tenhunen teaches: The computer-readable instructions wherein, if the navigational control device is symmetrical both vertically and horizontally, the logical remapping rotates the commands to the logical buttons (figs. 1a-1c).

72. Regarding claim 34, Tenhunen teaches: A hardware control device for a method of logically remapping the commands to logical buttons for a navigational device coupled to a physically rotate-able display device having a display, said navigational device having logical buttons and associated commands for such logical buttons, said method comprising; and logically remapping the commands to the logical buttons based on the orientation of the display device (figs. 1a-1c).

73. Tenhunen doesn't teach: determining an orientation for the display device.

74. The analogous prior art Zatloukal teaches: determining an orientation for the display device (fig. 3, 310) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

Art Unit: 2628

75. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine determining an orientation for the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

76. Regarding claim 35, Tenhunen teaches: The hardware control device wherein the display device is a visual display device (figs. 1a-1c).

77. Regarding claim 37, Tenhunen teaches: The hardware control device wherein the display device is one from the group comprising: visual display device, audio display device, and tactile display device (figs. 1a-1c).

78. Regarding claim 38, Tenhunen teaches: The hardware control device wherein, then the logical mapping of the commands to the logical buttons occurs automatically (figs. 1a-1c).

79. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

80. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

81. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

Art Unit: 2628

82. Regarding claim 39, Tenhunen teaches: The hardware control device wherein, then the logical mapping of the commands to the logical buttons occurs in response to user input [0026].

83. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

84. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

85. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

86. Regarding claim 40, Tenhunen doesn't teach: The hardware control device wherein, regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device.

87. The analogous prior art Zatloukal teaches: The hardware control device wherein, regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

Art Unit: 2628

88. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine wherein, regarding the step of determining the orientation display, the orientation is determined based on the orientation of a display on a display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

89. Regarding claim 41, Tenhunen teaches: The hardware control device wherein, then the logical mapping of the commands to the logical buttons occurs automatically (figs. 1a-1c).

90. Tenhunen doesn't teach: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device.

91. The analogous prior art Zatloukal teaches: if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device (fig. 3, 302 and 304) for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

92. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display on the display device is changed to a different orientation, presumably to match a change in a physical orientation of the display device as shown in Zatloukal with Tenhunen for the benefit of to provide a novel method for adding control keys to a mobile device, such as a wireless mobile phone or a PDA, via an interchangeable cover.

93. Regarding claim 42, Tenhunen teaches: The hardware control device wherein, if the navigational control device is symmetrical both vertically and horizontally, the logical remapping rotates the commands to the logical buttons (figs. 1a-1c).

Art Unit: 2628

94. Claims 10-11, 21-22, 32-33, 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tenhunen et al. Pub. No.: US 2002/0198029 A1 in view of Zatloukal et al. Pub. No.: US 2003/0073462 A1 further in view of Kfoury et al. Pub. No.: US 2003/0044000 A1.

95. Regarding claim 10, the previous combination of Tenhunen and Zatloukal remains as above but doesn't teach: The method wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation.

96. The analogous prior art Kfoury teaches: The method wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation (figs. 1-4) for the benefit of best accommodating both right and left hand users.

97. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation as shown in Kfoury with the previous combination for the benefit of best accommodating both right and left hand users.

Art Unit: 2628

98. Regarding claim 11, the previous combination of Tenhunen and Zatloukal remains as above but doesn't teach: The method wherein: if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed; if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed; and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed.

99. The analogous prior art Kfoury teaches: The method wherein: if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed (figs. 2 and 4); if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed (figs. 2-4); and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed (fig. 3) for the benefit of best accommodating both right and left hand users.

100. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed; if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed; and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed as shown in Kfoury with the previous combination for the benefit of best accommodating both right and left hand users.

101. Regarding claim 21, the previous combination of Tenhunen and Zatloukal remains as above but doesn't teach: The system wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking

Art Unit: 2628

dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation.

102. The analogous prior art Kfoury teaches: The system wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation (figs. 1-4) for the benefit of best accommodating both right and left hand users.

103. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation as shown in Kfoury with the previous combination for the benefit of best accommodating both right and left hand users.

104. Regarding claim 22, the previous combination of Tenhunen and Zatloukal remains as above but doesn't teach: The system wherein: if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed; if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed; and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed.

Art Unit: 2628

105. The analogous prior art Kfoury teaches: The system wherein: if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed (figs. 2 and 4); if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed (figs. 2-4); and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed (fig. 3) for the benefit of best accommodating both right and left hand users.

106. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed; if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed; and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed as shown in Kfoury with the previous combination for the benefit of best accommodating both right and left hand users.

107. Regarding claim 32, the previous combination of Tenhunen and Zatloukal remains as above but doesn't teach: The computer-readable instructions wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation.

108. The analogous prior art Kfoury teaches: The computer-readable instructions wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes

Art Unit: 2628

the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation (figs. 1-4) for the benefit of best accommodating both right and left hand users.

109. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation as shown in Kfoury with the previous combination for the benefit of best accommodating both right and left hand users.

110. Regarding claim 33, the previous combination of Tenhunen and Zatloukal remains as above but doesn't teach: The computer-readable instructions wherein: if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed; if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed; and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed.

111. The analogous prior art Kfoury teaches: The computer-readable instructions wherein: if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed (figs. 2 and 4); if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed (figs. 2-4); and if the display device is rotated three-quarters to the right, then the

Art Unit: 2628

commands for PREV and NEXT are transposed (fig. 3) for the benefit of best accommodating both right and left hand users.

112. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed; if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed; and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed as shown in Kfoury with the previous combination for the benefit of best accommodating both right and left hand users.

113. Regarding claim 43, the previous combination of Tenhunen and Zatloukal remains as above but doesn't teach: The hardware control device wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation.

114. The analogous prior art Kfoury teaches: The hardware control device wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation (figs. 1-4) for the benefit of best accommodating both right and left hand users.

Art Unit: 2628

115. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine wherein, for navigational control device that are symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the display devices original orientation as shown in Kfoury with the previous combination for the benefit of best accommodating both right and left hand users.

116. Regarding claim 44, the previous combination of Tenhunen and Zatloukal remains as above but doesn't teach: The hardware control device wherein: if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed; if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed; and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed.

117. The analogous prior art Kfoury teaches: The hardware control device wherein: if the display device is rotated one quarter to the right, the commands for UP and DOWN are transposed (figs. 2 and 4); if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed (figs. 2-4); and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed (fig. 3) for the benefit of best accommodating both right and left hand users.

118. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine if the display device is rotated one quarter to the right, the commands for

Art Unit: 2628

UP and DOWN are transposed; if the display device is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed; and if the display device is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed as shown in Kfoury with the previous combination for the benefit of best accommodating both right and left hand users.

119. Claims 3, 14, 25, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tenhunen et al. Pub. No.: US 2002/0198029 A1 in view of Zatloukal et al. Pub. No.: US 2003/0073462 A1 further in view of Kfoury et al. Pub. No.: US 2003/0044000 A1 further in view of Pinder et al. Patent No.: US 5,758,267.

120. Regarding claim 3, the previous combination of Tenhunen and Zatloukal and Kfoury remains as above but doesn't teach: The method wherein the display device is a non-visual display device.

121. The analogous prior art Pinder teaches: The method wherein the display device is a non-visual display device (fig. 1) for the benefit of enhancing the functionality of switches or buttons without adding additional buttons and without creating a scheme that is not intuitive to the user.

122. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine wherein the display device is a non-visual display device as shown in Pinder with the previous combination for the benefit of enhancing the functionality of switches or buttons without adding additional buttons and without creating a scheme that is not intuitive to the user.

Art Unit: 2628

123. Regarding claim 14, the previous combination of Tenhunen and Zatloukal and Kfoury remains as above but doesn't teach: The system wherein the display device is a non-visual display device.

124. The analogous prior art Pinder teaches: The system wherein the display device is a non-visual display device (fig. 1) for the benefit of enhancing the functionality of switches or buttons without adding additional buttons and without creating a scheme that is not intuitive to the user.

125. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine wherein the display device is a non-visual display device as shown in Pinder with the previous combination for the benefit of enhancing the functionality of switches or buttons without adding additional buttons and without creating a scheme that is not intuitive to the user.

126. Regarding claim 25, the previous combination of Tenhunen and Zatloukal and Kfoury remains as above but doesn't teach: The computer-readable instructions wherein the display device is a non-visual display device.

127. The analogous prior art Pinder teaches: The computer-readable instructions wherein the display device is a non-visual display device (fig. 1) for the benefit of enhancing the functionality of switches or buttons without adding additional buttons and without creating a scheme that is not intuitive to the user.

128. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine wherein the display device is a non-visual display device as shown in Pinder with the previous combination for the benefit of enhancing the functionality of switches

Art Unit: 2628

or buttons without adding additional buttons and without creating a scheme that is not intuitive to the user.

129. Regarding claim 36, the previous combination of Tenhunen and Zatloukal and Kfoury remains as above but doesn't teach: The hardware control device wherein the display device is a non-visual display device.

130. The analogous prior art Pinder teaches: The hardware control device wherein the display device is a non-visual display device (fig. 1) for the benefit of enhancing the functionality of switches or buttons without adding additional buttons and without creating a scheme that is not intuitive to the user.

131. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine wherein the display device is a non-visual display device as shown in Pinder with the previous combination for the benefit of enhancing the functionality of switches or buttons without adding additional buttons and without creating a scheme that is not intuitive to the user.

Conclusion

132. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pub. Nos.: US 2004/0080487 A1; US 2003/0148772 A1; US 2004/0026136 A1; US 2003/0107555 A1; Patent No.: US 6,686,931 B1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAURICE MCDOWELL, JR whose telephone number is (571)270-3707. The examiner can normally be reached on Mon-Friday 7:30am - 5:00pm Eastern Time.

Art Unit: 2628

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on 571--272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MM

/XIAO M. WU/
Supervisory Patent Examiner, Art Unit 2628